

**REMARKS**

In response to the Office Action mailed August 16, 2006, Applicant submits the following remarks and requests reconsideration thereof. Claims 1-28 remain pending in the application. No claim amendments are set forth in this response.

**Telephonic Interview**

Applicant thanks the Examiner for his time and comments during the telephonic interview conducted with Applicant's representatives, Damon Ashcraft and David Barker on October 3, 2006. During that interview, Mr. Ashcraft and Mr. Barker pointed out that the present invention comprises test pads formed on a die and that U.S. Patent No. 5,378,981 to Higgins, III ("Higgins") failed to disclose a device with test pads formed on the die. Therefore, Mr. Ashcraft and Mr. Barker argued that Higgins could not be used to reject the claims under 35 U.S.C. §102(b) since Higgins failed to disclose a device with test pads formed on the die. The Examiner agreed and stated he would remove the rejections of the claims under 35 U.S.C. §102(b). This response formalizes Applicant's arguments noted above.

**The §102 Rejections**

The Examiner rejected claims 1-28 under 35 U.S.C. §102(b) as being anticipated by Higgins. To anticipate a claim, the relied upon reference must disclose every element of the rejected claim. *MPEP* §2131.

Independent claim 1 recites a method for forming a die, the method comprising: forming a die on a wafer, said die having an active portion comprising integrated circuitry, wherein said

die has at least one input bond pad formed on said active portion; forming at least one test pad on said die; and forming a conductive path between said at least one input bond pad and said at least one test pad, wherein a portion of said conductive path is formed on said die between an edge of said die and said active portion of said die. As noted in the telephonic interview, claim 1 includes the element of forming at least one test pad on said die.

Applicant respectfully notes to the Examiner that the test pads 16 disclosed by Higgins are not formed or disposed on the die, but rather that they are located outside the die as shown in Figs. 1 & 3. Higgins explicitly states that "...conductive traces 14 terminates in a plurality of test pads 16 placed in a standard pattern around the periphery of the central die accommodating region." Emphasis added. See column 3, lines 41-43. Further, as shown in Fig. 3, the semiconductor die 32 is placed within an excise region 20 located on nonconductive material 12. Semiconductor die 32 includes various bonding pads 34 that are connected to test pads 16 by conductive traces 14. See Fig. 3 and column 4, lines 10-34. Test pads 16 are formed on the nonconductive material 12, not on the die as claimed in claim 1.

Since Higgins fails to disclose forming a test pad on a die, it does not disclose every element of claim 1 and the anticipation rejection is improper per *MPEP* §2131. Applicant respectfully requests that this rejection be withdrawn.

Claims 2-8 either directly or indirectly depend from independent claim 1. Therefore, Applicant submits claims 2-8 are also not anticipated by Higgins at least for the same reasons as independent claim 1 in addition to their own respective features. Therefore, Applicant respectfully requests withdrawal of the rejections of claims 2-8.

Independent claim 9 recites a die assembly formed on a wafer, the die assembly comprising a die formed on the wafer, said die having an active portion comprising integrated

circuitry, at least one input bond pad formed on said active portion of said die, at least one test pad formed entirely on said die, and a conductive path that electrically couples said at least one input bond pad to said at least one test pad, wherein a portion of said conductive path is formed between an edge of said die and said active portion of said die.

Independent claim 9 includes the element of “a test pad formed entirely on said die”, a feature not disclosed by Higgins as described above. Therefore, Higgins fails to disclose every element of claim 9 and Applicant respectfully requests the Examiner to withdraw this rejection as well.

Claims 10-13 either directly or indirectly depend from independent claim 9. Therefore, Applicant submits claims 10-13 are also not anticipated by Higgins at least for the same reasons as independent claim 9 in addition to their own respective features. Therefore, Applicant respectfully requests withdrawal of the rejections of claims 10-13.

Independent claim 14 recites a method for preparing a die on a wafer for testing by a testing apparatus, the method comprising forming a die on a wafer, said die having an active portion comprising integrated circuitry, forming a plurality of input bond pads on said active portion, forming a plurality of test pads entirely on said die, said plurality of test pads accessible to the testing apparatus, at least one of said plurality of test pads corresponding to at least one of said plurality of input bond pads, forming a conductive path between said at least one of said plurality of test pads and said at least one of said plurality of input bond pads, wherein a portion of said conductive path is formed between an edge of said die and said active portion of said die, and testing said die by contacting said at least one of said plurality of test pads with the testing apparatus.

Independent claim 14 includes the element of “forming a plurality of test pads entirely on said die”, a feature not disclosed by Higgins as described above. Therefore, Higgins fails to disclose every element of claim 14 and Applicant respectfully requests the Examiner to withdraw this rejection as well.

Claims 15-20 either directly or indirectly depend from independent claim 14. Therefore, Applicant submits claims 15-20 are also not anticipated by Higgins at least for the same reasons as independent claim 14 in addition to their own respective features. Therefore, Applicant respectfully requests withdrawal of the rejections of claims 15-20.

Independent claim 22 recites a die comprising an active portion comprising integrated circuitry, a plurality of input bond pads formed on said active portion, a plurality of test pads formed entirely on said die, and a plurality of conductive lines, wherein each of said conductive lines is initially formed to electrically couple at least one of said plurality of input bond pads to at least one of said plurality of test pads, and wherein a portion of said each of said conductive lines is formed on an area between an edge of said die and said active portion of the die.

Independent claim 22 includes the element of “a plurality of test pads formed entirely on said die”, a feature not disclosed by Higgins as described above. Therefore, Higgins fails to disclose every element of claim 22 and Applicant respectfully requests the Examiner to withdraw this rejection as well.

Claims 23-26 either directly or indirectly depend from independent claim 22. Therefore, Applicant submits claims 23-26 are also not anticipated by Higgins at least for the same reasons as independent claim 22 in addition to their own respective features. Therefore, Applicant respectfully requests withdrawal of the rejections of claims 23-26.

Independent claim 28 as originally presented recites a die comprising an active portion comprising integrated circuitry, a plurality of input bond pads formed on said active portion, a plurality of test pads formed on said die, a plurality of conductive lines, wherein each of said conductive lines is initially formed to electrically couple at least one of said plurality of input bond pads to at least one of said plurality of test pads, and wherein a portion of said each of said conductive lines is formed on a scribe area outside the die.

Independent claim 28 includes the element of “a plurality of test pads formed on said die”, a feature not disclosed by Higgins as described above. Therefore, Higgins fails to disclose every element of claim 28 and Applicant respectfully requests the Examiner to withdraw this rejection as well.

**CONCLUSION**

In view of the foregoing, Applicant respectfully submits that all claims now pending are in condition for allowance. A Notice of Allowance is earnestly solicited at the earliest possible date. If the Examiner believes that a telephone conference would be useful in moving the application forward to allowance, the Examiner is encouraged to contact Damon Ashcraft at 602-382-6389. Applicant authorizes and respectfully requests that any fees due be charged to Deposit Account No. 19-2814.

Date: \_\_\_\_\_

11/15/06

Respectfully submitted,

By: \_\_\_\_\_

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